

WHAT IS CLAIMED

1. A method of selectively coupling digital communication packets, that are presented to virtual circuit input ports of a packet switch, through said switch to virtual circuit output ports thereof, said
5 method comprising the steps of:

(a) providing a plurality of packet analyzers, a respective one of which is operative to analyze contents of a packet presented thereto and to provide an output representative of whether or not said contents of said
10 packet contains prescribed information;

(b) coupling a packet presented to a respective virtual input port of said switch to respective ones of said plurality of packet analyzers; and

(c) in response to a respective packet analyzer to
15 which a packet is presented in step (b) supplying an output representative that the contents of the packet coupled thereto in step (b) contains said prescribed information, coupling said respective packet to a selected virtual circuit output port of said switch, but
20 otherwise not coupling said respective packet to a virtual circuit output port of said switch.

2. The method according to claim 1, wherein step (b) comprises coupling a packet presented to a respective virtual input port of said switch to a prescribed order

of said plurality of packet analyzers, and step (c)
5 comprises, in response to any packet analyzer of said
prescribed order of said plurality of packet analyzers
supplying said output representative that contents of the
packet coupled thereto contains said prescribed
information, coupling said respective packet to a
10 selected virtual circuit output port of said switch, and
terminating coupling of said packet to any remaining ones
of said prescribed order of said plurality of packet
analyzers.

3. The method according to claim 1, wherein step
(c) comprises, in response to no packet analyzer having
a configuration function for which there is an associated
virtual circuit port of said switch, accepting the packet
5 coupled thereto and discarding said packet.

4. The method according to claim 1, wherein
step (a) comprises providing a prescribed order of
first through N-1th packet analyzers having configuration
functions for there are associated virtual circuit ports
5 of said switch, and an Nth packet analyzer having no
configuration functions for there is an associated
virtual circuit port of said switch,

step (b) comprises coupling said packet presented to
a respective virtual input port of said switch to

10 respective ones of said first through N-1th packet
analyzers, and

 step (c) comprises, in response to any of said first
through N-1th packet analyzers supplying an output
representative that the contents of the packet coupled
15 thereto in step (b) contains said prescribed information,
coupling said respective packet to a selected virtual
circuit output port of said switch, but in response to
none of said first through N-1th packet analyzers
supplying an output representative that the contents of
20 the packet coupled thereto in step (b) contains said
prescribed information, causing said Nth packet analyzer
to accept and discard said packet.

5 5. A packet switch control mechanism for
controlling the selective coupling of digital
communication packets presented to virtual circuit input
ports of a packet switch to virtual circuit output ports
5 thereof comprising:

 a plurality of packet analyzers, a respective one of
which is operative to analyze contents of a packet
presented thereto and to provide an output representative
of whether or not said contents of said packet contains
10 prescribed information; and

 a packet distribution controller coupled to said
plurality of packet analyzers and being operative, in

response to a respective packet analyzer supplying an output representative that the contents of the packet
15 coupled thereto contains said prescribed information, to couple said respective packet to a selected virtual circuit output port of said switch, but otherwise not coupling said respective packet to a virtual circuit output port of said switch.

6. The packet switch control mechanism according to claim 5, wherein said packet distribution controller is operative, in response to any packet analyzer of a prescribed order of said plurality of packet analyzers
5 supplying said output representative that contents of the packet coupled thereto contains said prescribed information, to cause said respective packet to be coupled to a selected virtual circuit output port of said switch, and to terminate further coupling of said packet
10 to any remaining ones of said prescribed order of said plurality of packet analyzers.

7. The packet switch control mechanism according to claim 5, wherein said packet distribution controller is operative, in response to no packet analyzer having a configuration function for which there is an associated
5 virtual circuit port of said switch, to causes said packet to be accepted and discarding.

8. The packet switch control mechanism according to claim 5, wherein said plurality of packet analyzers comprises a prescribed order of first through N-1th packet analyzers having configuration functions for there are associated virtual circuit ports of said switch, and an Nth packet analyzer having no configuration functions for there is an associated virtual circuit port of said switch, and wherein said packet distribution controller is operative, in response to any of said first through N-1th packet analyzers supplying an output representative that the contents of the packet coupled thereto contains said prescribed information, to couple said respective packet to a selected virtual circuit output port of said switch, and wherein said Nth packet analyzer is operative, in response to having said packet coupled thereto, to accept and discard said packet.